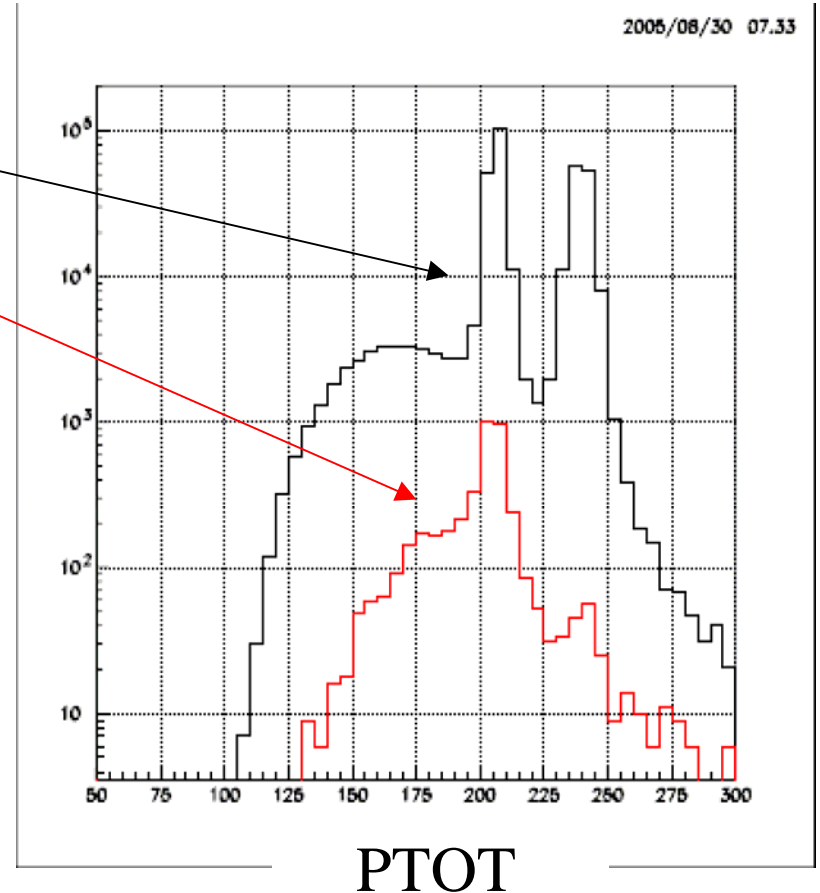


A look at kinks

- CCDPUL can reject some events in which the k decays to a π and the π undergoes scattering within a 'kaon' fiber
- 2 mechanisms
 - π travels for some distance in kaon fiber, dropping $\sim 2 \text{ MeV/cm}$ through dE/dX
 - Inelastic collision of pion creates secondary particles, some of which may leave a trace of their presence

- Perhaps a ‘kink’ sample can tell us something about the visible byproducts of the 2nd mechanism
- Start with kp21 monitor sample
 - Apply the old (biased) pscut02_kink cut to remove some beam backgrounds
 - In addition, apply
 - $\text{abs(tk)} < 3$
 - $\text{tpi-tk} > 5$
 - $6 < \text{npi_tg} < 20$

- itgqualt=0
- **kinkqual=1**
- ~1% of kp2 peak is reconstructed as 'kinks'
- km2 peak suppressed by ~additional factor of 10, but still shows 'kink' sample isn't very pure



- Cut kink and non-kink samples into 'elastic' and 'inelastic' regions:
195 < PTOT < 215 ('E')
150 < PTOT < 190 ('I')
- Plot max(epi_tg)
excluding all fibers in which a k and pi overlap
- Some evidence of contribution from recoil charged nuclear debris

